What is claimed is:

1. A combination comprising a plurality of cDNAs that are differentially expressed in a liver treated with a toxin and are selected from SEQ ID NOs:1-514 and the complements thereof.

2. The combination of claim 1 wherein each of the cDNAs is differentially expressed at least three-fold.

3. The combination of claim 1 wherein the toxin is selected from acetominophen (APAP), benzo(a)pyrene (BP), clofibrate (CLO), α-naphthylisothiocyanate (ANIT), 4-acetylaminofluorene (4-AAF), hydrazine (Hydra), fenofibrate (Feno), and carbon tetrachloride (CCL4).

4. A combination comprising a plurality of cDNAs that are differentially expressed in a liver disorder and are selected from:

a) SEQ ID NOs:1-202;

b) SEQ ID NOs:203-399;

c) SEQ ID NOs:400-514; and

d) the complement of (a), (b), or (c).

5. The combination of claim 4 wherein the liver disorder is selected from biliary cirrhosis, X-linked adrenoleukodystrophy, Zellweger syndrome, hepatorenal syndrome, hepatitis, and hepatocarcinoma.

6. The combination of claim 4 wherein the liver disorder is biliary cirrhosis.

7. The combination of claim 4 wherein the cDNAs are immobilized on a substrate.

8. A high throughput method for detecting differential expression of one or more cDNAs in a sample containing nucleic acids, the method comprising:

a) hybridizing the substrate of claim 7 with nucleic acids of the sample, thereby forming one or more hybridization complexes;

b) detecting the hybridization complexes; and

c) comparing the hybridization complexes with standards, wherein the differences between the standard and sample hybridization complexes indicates differential expression of cDNAs in the sample.

9. The method of claim 8, wherein the nucleic acids of the sample are amplified prior to hybridization.

10. The method of claim 8, wherein the sample is from a subject with biliary cirrhosis and comparison with a standard defines an early, mid, or late stage of that disease.

11. A high throughput method of screening a plurality of molecules or compounds to identify a ligand which specifically binds a cDNA, the method comprising:

a) combining the combination of claim 1 with the plurality of molecules or compounds under conditions to allow specific binding; and

b) detecting specific binding between each cDNA and at least one molecule or compound, thereby identifying a ligand that specifically binds to each cDNA.

12. The method of claim 11 wherein the plurality of molecules or compounds are selected from DNA molecules, RNA molecules, peptide nucleic acid molecules, mimetics, peptides, transcription factors, repressors, and regulatory proteins.

13. An isolated cDNA selected from SEQ ID NOs: 411, 441, 432, 450, 457, 465, 474, 477, 499, 501, 510.

14. A vector containing the cDNA of claim 13.

15. A host cell containing the vector of claim 14.

16. A method for producing a protein, the method comprising the steps of:

a) culturing the host cell of claim 15 under conditions for expression of protein; and

b) recovering the protein from the host cell culture.

17. A protein or a portion thereof produced by the method of claim 16.

18. A high-throughput method for using a protein to screen a plurality of molecules or compounds to identify at least one ligand which specifically binds the protein, the method comprising:

a) combining the protein of claim 17 with the plurality of molecules or compounds under conditions to allow specific binding; and

b) detecting specific binding between the protein and a molecule or compound, thereby identifying a ligand which specifically binds the protein.

19. The method of claim 18 wherein the plurality of molecules or compounds is selected from DNA molecules, RNA molecules, peptide nucleic acid molecules, mimetics, peptides, proteins, agonists, antagonists, antibodies or their fragments, immunoglobulins, inhibitors, drug compounds, and pharmaceutical agents.

20. A method of using a protein to produce an antibody, the method comprising:

a) immunizing an animal with the protein of claim 17 under conditions to elicit an antibody response;

b) isolating animal antibodies; and

c) screening the isolated antibodies with the protein, thereby identifying an antibody which specifically binds the protein.